

ability of prescription of asthma medications, there appears to be an unmet need and further research is necessary.

PRS61

ECONOMIC EVALUATION OF ENHANCED ASTHMA MANAGEMENT: A SYSTEMATIC REVIEW

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OBJECTIVES: To evaluate, compare, and assess the quality of the studies on the cost-effectiveness of enhanced management (either as adjunct to usual care or alone) vs. usual care alone or none at all. **METHODS:** Scientific databases (ScienceDirect, Wiley Online Library, (EbscoHost – MEDLINE, CINAHL, PSYInfo), (OvidSP – EMBASE, MEDLINE), and Scopus) were searched for published journal articles in English language from year 1990 to 2012, using the search terms “asthma AND (intervene OR manage) AND (pharmacoeconomics OR economic evaluation OR cost effectiveness OR cost benefit OR cost utility)”. Hand search was done for local publications. Only studies with full economic evaluation on enhanced management (either as adjunct to usual care or alone) were included. Selected studies were data abstracted and assessed for their quality of economic evaluation using the Quality of Health Economic Studies (QHEs) instrument, and quality of evidence. **RESULTS:** A total of 14 studies were included. There were three distinct modes reviewed: environmental control, self-management, education. Most of the enhanced managements were found to be cost-effective with ICER ranged from dominant to \$26700.00 per unit of outcome. Overall, the mean score of QHEs was 76.69% (SD 9.26). For the quality of evidence, ‘clinical effect sizes, adverse events & complication’, baseline clinical data, resource use, and costs components were ranked mainly 1 or 2 (best or nearly best) in all studies. For ‘utilities’ component, one study ranked 5 because it used visual analogue scale to obtain patient preference values. **CONCLUSIONS:** Despite the low qualities of the reviewed studies, it overall suggests that enhanced management (either as adjunct to usual care or alone) is mostly cost-effective than the usual care or none at all; environmental control is considered the most cost-effective, and there is also strong evidence for self-management, but provided the mode of it is made available, affordable, and accessible then this shall be worth to be adapted in one's setting.

PRS62

ECONOMIC EVALUATION OF THE IMPACT OF NEW TREATMENT ALTERNATIVES ON MARKET DYNAMICS IN RESPIRATORY DISEASES; A CASE STUDY IN TURKISH HEALTH CARE SYSTEM

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OBJECTIVES: Economic evaluation of the change in market dynamics of a sample ProductA¹ through its inclusion in Therapeutic Equivalence Band (TEB) (with products B² and C³) between 2010 and 2012 in Turkish health care system. **METHODS:** IMS Dataview was analyzed for 2010-2012 unit sales values (market entry timeline for products A, B, C is 2006, 2009 and 2009, respectively) in the TEB. IMS Medical Index is used for estimating prescription data for the corresponding products. Assumptions on median patient adherence (receipt of prescribed treatment in pharmacy) are applied to prescription data in order to calculate unit sales (prediction). Deviation calculations and sensitivity analysis on market dynamics were performed in Microsoft Excel-2007. **RESULTS:** Deviations between unit sales predictions and realizations for products A, B and C occurred as +11.48%, -5.41% and -20.85% in 2010, -10.16%, +8.14% and -53.87% in 2011 and -31.89%, +28.92% and -67.76% in 2012 respectively. Negative deviation values indicate that receipt of prescription cannot be transformed to receipt of the prescribed product in pharmacy, however positive deviation values correspond to receipt of a product in pharmacy which is different from the content of the prescription. **CONCLUSIONS:** The TEB system allows receipt of a different product than prescription. This study shows alteration of market dynamics in pharmacy as a change from prescribed inhaler option (as negative deviation value), which is linked to receipt of another inhaler option (as a positive deviation value) within the same TEB. Real life data may be collected for further analysis of TEB system in dynamics of corresponding market. ¹Originator treatment in TEB-Novartis-Budesonide(400mcg)&Formoterol(12mcg), ²Second treatment in TEB-Bilim Pharma, ³Third treatment in TEB-Abdi Ibrahim Pharma.

PRS63

ESTIMATES OF PRICE AND INCOME ELASTICITY IN GREECE: GREEK DEBT CRISIS TRANSFORMING CIGARETTES INTO A LUXURY GOOD

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OBJECTIVES: Greece was long reported to show a smoking prevalence over 40% on adult population, as efforts to constrain smoking were rather ineffective. Following a sharp fall in cigarette consumption for 2012, our objective is to assess smokers' sensitivity to cigarette price and consumer income changes as well as to project health benefits of an additional tax increase. **METHODS:** Analysis includes the conventional model of demand, the myopic addiction model and the rational addiction model. Cigarette consumption for the period 1994-2012 was the dependent variable with Weighted Average Price as a proxy for cigarette price, GDP as a proxy for consumer income and dummy variables reflecting smoking restrictions and antismoking campaigns. Values were computed to natural logarithms and regression was performed. Then, 4 scenarios of tax increase were distinguished in order to calculate potential health benefits. **RESULTS:** Addiction models are unable to provide statistically significant information following a nearly 23.5% drop in consumption during 2012. Short-run price elasticity is estimated at -0.441 and short-run income elasticity is estimated at 1.040. Antismoking campaigns were found to have a statistically significant impact on consumption. Results indicate that, depending on the level of tax increase, annual per capita consumption could fall by up to 607.99 cigarettes; tax revenue could rise by at least €39 million, while up to 595,866 smokers could quit and up to 2,696 smoking related deaths could

be averted. **CONCLUSIONS:** Price elasticity estimates are greater than previous studies in Greece and consistent with literature internationally, while income elasticity estimates are far greater. With cigarettes regarded as a luxury good, a great opportunity is presented for decision makers to counter smoking. Increased taxation, along with focused antismoking campaigns, law reinforcement (to ensure compliance with smoking bans) and intensive control for smuggling could inflict a massive blow to the tobacco epidemic in Greece.

PRS64

PREVALENCE OF COMORBIDITIES AMONG CHRONIC COPD PATIENTS IN THE UNITED STATES

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OBJECTIVES: COPD is the third leading cause of death with increasing mortality while other chronic condition mortality rates are decreasing. This may be due to the fact that COPD is a complex chronic condition with a complicated diagnosis and treatment guideline in an aging patient population with increasing comorbid conditions. The objective of this study was to understand the prevalence of comorbid conditions among COPD patients in the US. **METHODS:** A retrospective database analysis was conducted using MarketScan Commercial and Medicare Supplement Data from year 1/1/2010 to 12/31/2011. Patients were included if they had continuous medical and pharmacy benefits coverage for at least 12 months after their first COPD diagnosis defined as primary or ancillary ICD-9 codes of 491.xx, 492.xx, or 496.xx and were between the ages of 40 and 90 years old at the time of diagnosis. Univariate descriptive analyses were conducted to quantify comorbid disease prevalence. **RESULTS:** Among the selected patients (n=231,827), 95.1% (n=220,519) had medical claims (ICD-9 codes) for diagnoses beyond COPD within 12 months of their COPD diagnosis. The majority of patients were over 65 years old (61.4%, n=135,366). Over 60% (n=130,325) of the patients had more than 3 comorbid conditions. The most common were hypertension (64.9%, n=143,189) (ICD-9 codes 401.xx-405.xx, 415, 416, 416.8, 459.1x and 459.3x), hyperlipidemia (46.5%, n=102,498) (ICD-9 code 272.x), diabetes (27.8%, n=61,225) (ICD-9 code 249.xx, 250.xx, 253.5, 271.4, 357.2, 588.1, 790.29), coronary artery disease (27.4%, n=60,364) (ICD-9 code 414.0x, 414.3, 414.4), and asthma (22.7%, n=50,113) (ICD-9 code 493.xx). **CONCLUSIONS:** Our results show the significant prevalence of comorbid conditions among COPD patients. Further research on comorbid conditions impacting COPD patient treatment adherence, COPD pathogenic pathways and worsening overall prognosis are necessary. More evidence is required to estimate the role of comorbidities in COPD.

SYSTEMIC DISORDERS/CONDITIONS – Clinical Outcomes Studies

PSY1

EXAMINING THE BURDEN OF ILLNESS OF VETERAN PATIENTS DIAGNOSED WITH OBESITY IN THE UNITED STATES

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OBJECTIVES: To examine the burden of illness of diagnosed obesity in the U.S. veteran population. **METHODS:** A retrospective database analysis was performed using the Veterans Health Administration (VHA) Medical SAS datasets (01OCT2008-30SEPT2012). Patients diagnosed with obesity were identified (International Classification of Disease 9th Revision Clinical Modification [ICD-9-CM] diagnosis code 278.xx) with the first diagnosis date designated as the index date. A group of patients without obesity but with the same age, region, gender and index year were identified and matched by baseline Charlson Comorbidity Index as a comparator group. The index date for the comparator group was randomly chosen to reduce selection bias. Patients in both groups were required to be at least 18 years old, and have 1 year of continuous medical and pharmacy benefits before and after the index date. Study outcomes, including health care costs and utilizations, were compared between the disease and comparator groups by using 1:1 propensity score matching. **RESULTS:** A total of 1,525,218 patients were identified for the obesity and comparison cohorts. After applying 1:1 matching, a total of 634,257 of patients were included in each group, and the baseline demographic and clinical characteristics were balanced. The obesity cohort had higher percentages of health care utilizations for inpatient (6.21% vs. 2.92%, p<0.01), emergency room (11.96% vs. 7.28%, p<0.01), physician office (99.84% vs. 60.12%, p<0.01), outpatient (99.86% vs. 60.85%, p<0.01), and pharmacy visits (89.01% vs. 61.71%, p<0.01) than the comparator group. Patients diagnosed with obesity also incurred higher expenditures in inpatient (\$1,812 vs. \$875, p<0.01), emergency room (\$117 vs. \$69, p<0.01), physician office (\$2,936 vs. \$1,436, p<0.01), outpatient (\$3,288 vs. \$1,621) and pharmacy visits (\$641 vs. \$423, p<0.01) compared to non-obese patients. **CONCLUSIONS:** Study results suggest that patients diagnosed with obesity incurred significantly higher costs and utilizations than non-obese patients.

PSY2

CLINICAL EFFECTIVENESS ANALYSIS OF DEFERASIROX FOR THE TREATMENT OF IRON OVERLOAD DUE TO FREQUENT BLOOD TRANSFUSIONS

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OBJECTIVES: To compare clinical efficacy and safety of orphan drug deferasirox (DSX) versus deferoxamine (DFO) in the treatment of paediatric patients (age ≤ 18 years) with iron overload from repeated blood transfusions. The underlying conditions requiring transfusion included beta-thalassaemia, sickle cell disease and other congenital and acquired anaemias (myelodysplastic syndromes, Diamond-Blackfan syndrome, aplastic anaemia and other very rare anaemias). **METHODS:** We searched CENTRAL, MEDLINE and EMBASE for relevant randomized controlled trials (RCTs) published up to April 2012. The review was conducted in accordance